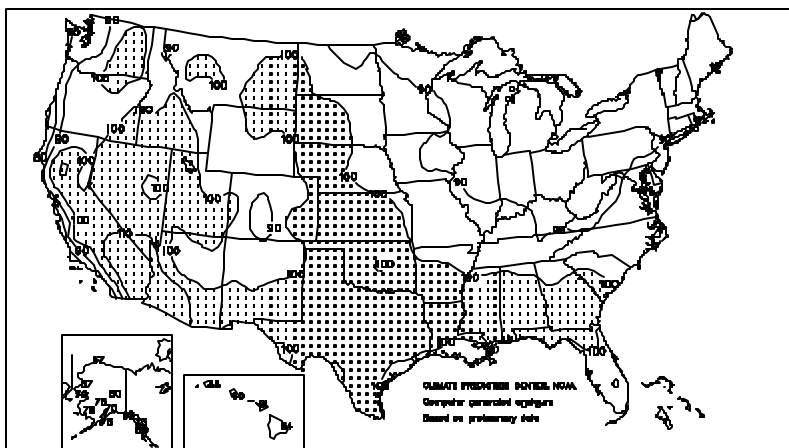


## Extreme Maximum Temperature (°F)

JUL 2000



July, 6.33 inches of which fell during the last 15 days of the month. Unusually cold air invaded much of the State toward month's end, when Kotzebue noted their first July snowfall (a trace on the 27<sup>th</sup>) since July 3, 1976.

In Hawaii, the late-month passage of Tropical Storm Daniel—more than 100 miles north of the islands—had little effect on long-term drought in leeward areas. Earlier in the month, showers had brought limited drought relief to leeward areas but heavy rain to many windward locations. On Oahu, Honolulu noted near-normal rainfall for the month (0.41 inch, or 69% of normal), but retained large precipitation deficits dating to late 1997. Honolulu's 33-month (November 1997 - July 2000) rainfall was 20.46 inches (33% of normal), or 42.10 inches below normal. On the Big Island, monthly totals in windward areas reached 13.16 inches (136% of normal) in Hilo, 20.84 inches (211%) in Glenwood, and 21.09 inches (165%) in Mountain View.

### Fieldwork

Temperatures averaged slightly below normal in the Corn Belt and adjacent parts of the Great Plains during July, but crop development remained about 1 week ahead of the normal throughout the month. Near-normal precipitation provided adequate moisture to maintain crop conditions, as early-month storms reduced moisture shortages in the western Corn Belt. At mid-month, serious moisture shortages remained in isolated pockets of the western Corn Belt and central Great Plains, while substantial moisture surpluses existed in parts of the central and eastern Corn Belt.

Above-normal temperatures, including periods of triple-digit heat, accelerated crop development in the Southeast, Great Plains, and interior parts of the Southwest. Although temperatures averaged below normal, periods of triple-digit heat also promoted crop development in the California Valleys and parts of the Pacific Northwest. A wet weather pattern gradually reduced drought and aided crops in Florida and along the Atlantic Coastal Plain. However, increasing moisture shortages stressed crops along the Gulf Coast and in the interior Southeast. Cooler-than-normal weather slowed crop development from the Middle Atlantic States into the Northeast. In the Great Plains, mostly dry weather aided the harvest of small grains.

The corn crop rapidly entered the silking stage early in the month. On July 2, almost half of the acreage was silking in Missouri and Kentucky, far ahead of normal in both States. During the week ending July 9, acreage silking advanced 35 percentage points in Kansas. By mid-month, nearly half of the crop was at or beyond the silking stage. In Illinois, Indiana, Iowa, and Nebraska, more than 30% of the acreage entered the silking stage during the week ending July 16. Acreage silking accelerated in the upper Mississippi Valley and northern Great Plains near mid-month, and more than 40% of the crop entered the silking stage in Minnesota during the week ending July 23. Progress lagged around the Great Lakes before mid-month, but silking accelerated in Michigan and Wisconsin after mid-month. Acreage at or beyond the silking stage advanced 25 or more percentage points in Colorado, North and South Dakota, and Ohio during the week ending July 30. Acreage at or beyond the dough stage accelerated in the southern Corn Belt near mid-month and progressed to 42% in Missouri and Tennessee by July 23. In Kentucky, 30% of the acreage was at or beyond the dough stage on July 23. During the week ending July 30, nearly one-fourth of the

crop entered the dough stage in Illinois. Progress was only slightly slower in Indiana, Kansas, Missouri, and Tennessee. In Missouri, 65% of the acreage was at or beyond the dough stage on July 30, the earliest since 1987.

Soybean fields rapidly entered the bloom stage across the Corn Belt, advancing 20 or more percentage points in many areas during the week ending July 9. Nationally, 36% of the crop was blooming by July 9, more than double the 17-percent average for that date. As mid-month approached, a period of hot weather accelerated development, especially in the western Corn Belt, Great Plains, and lower Mississippi Valley. During the week ending July 16, more than one-third of the acreage entered the bloom stage in Nebraska and North Dakota, while nearly 30% of the acreage entered the bloom stage in Iowa and Minnesota. Meanwhile, below-normal temperatures hindered development in Michigan and Ohio. After mid-month, fields continued to rapidly develop in the northern Great Plains and progress accelerated in the Great Lakes region. In North and South Dakota, about one-third of the acreage entered the bloom stage during the week ending July 23. In Michigan and Wisconsin, soybeans in bloom increased 30 and 36 percentage points, respectively, during the week ending July 30. During the last week of the month, acreage setting pods rapidly advanced in the central and western

Corn Belt and northern Great Plains. By the end of the month, 85% of the crop was blooming and 51% was setting pods, well ahead of the 5-year average for both stages.

The winter wheat harvest proceeded more than 1 week ahead of the 5-year average and was 65% complete on July 2. When the month began, harvest was nearly complete in Kansas and about half of the acreage was harvested in Nebraska. Harvest more than doubled in Illinois and Indiana during the week ending July 2, to 71 and 47%, respectively. During the week ending July 9, Ohio and Indiana producers harvested 50 and 36% of their wheat crop, respectively. In Colorado, growers harvested nearly half of their crop during the same week. Meanwhile, harvest remained active in Illinois, Missouri, and Nebraska. As mid-month approached, harvest remained active in the eastern Corn Belt, while progress accelerated in South Dakota and rapidly neared completion in Colorado and Nebraska. After mid-month, the harvest pace accelerated in the northern Great Plains, especially in South Dakota, while harvest progress gained momentum in the Pacific Northwest. In Nebraska, the harvest neared completion about 2 weeks ahead of normal. By the end of the month, the harvest was more than 90% complete, 1 week ahead of the 5-year average.

Spring wheat, barley, and oats developed well ahead of normal throughout the month. Nearly all oats were headed in the Corn Belt on July 2. By July 30, harvest was 38% complete, led by rapid progress in Iowa and Nebraska. Spring wheat and barley were 96% headed on July 23, and by the end of the month, spring wheat and barley were 6 and 7% harvested, respectively. Nearly one-fourth of the South Dakota spring wheat was harvested by the end of the month. The barley harvest was most advanced in Minnesota on July 30.

Cotton development progressed ahead of normal throughout the month, with 90% at or beyond the squaring stage on July 16 and 79% setting bolls by July 30. During the first half of the month, fields in the southern Great Plains and Atlantic Coastal Plains rapidly developed squares, and fields rapidly set bolls in the interior Mississippi Delta States. After mid-month, boll setting accelerated in the Southeast. Occasional showers briefly relieved stress due to severe moisture shortages, but drought conditions gradually expanded in interior areas of the Southeast. Cool, wet weather delayed development in Virginia most of the month, and progress lagged at the end of the month despite late-month acceleration. By July 23, nearly all of the California cotton was squaring, nearly 2 weeks ahead of normal, despite below-normal temperatures.

The rice crop developed slightly ahead of normal, as fields rapidly headed along the western Gulf Coast early in the month and in the interior Mississippi Delta States late in the month. Eight percent was harvested on July 30, led by rapid progress in Louisiana, where progress was far ahead of normal, and Texas, where progress was slightly ahead of the 5-year average. Sorghum also progressed ahead of the 5-year average, with 62% headed and 26% turning color on July 30, compared with the average pace of 44 and 22%, respectively. Development was slightly ahead of normal in Texas, well ahead of normal in other parts of the Great Plains and Mississippi Delta, and far ahead of normal in the Corn Belt. Eighty-four percent of the peanut acreage was pegging at the end of the month. In Alabama and Virginia, development accelerated late in the month, but remained well behind normal. Moisture shortages stressed most fields in the Southeast, while abnormally wet hindered development along the mid-Atlantic.